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| APPLICATION NO.   | FILING DATE | FIRST NAMED INVENTOR | ATTORNEY DOCKET NO.        | CONFIRMATION NO. |
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| 10/091,584  | 03/07/2002  | Rudolf Caspari       | 1454.1225                  | 7693             |
| 21171   | 7590        | 11/14/2005           |                            |                  |
| STAAS & HALSEY LLP<br>SUITE 700<br>1201 NEW YORK AVENUE, N.W.<br>WASHINGTON, DC 20005 |             |                      | EXAMINER<br>PIERRE, MYRIAM |                  |
|   |             |                      | ART UNIT<br>2654           | PAPER NUMBER     |

DATE MAILED: 11/14/2005

Please find below and/or attached an Office communication concerning this application or proceeding.

**Office Action Summary**

Application No.

10/091,584

Applicant(s)

CASPARI, RUDOLF

Examiner

Myriam Pierre

Art Unit

2654

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

**Period for Reply**

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

**Status**

- 1) ☐ Responsive to communication(s) filed on 04 May 2005.
- 2a) ☒ This action is **FINAL**. 2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

**Disposition of Claims**

- 4) ☒ Claim(s) 1-14 is/are pending in the application.
- 4a) Of the above claim(s) 15 is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 1-14 is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_\_ is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

**Application Papers**

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on \_\_\_\_\_ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

**Priority under 35 U.S.C. § 119**

- 12) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☒ All b) ☐ Some \* c) ☐ None of:
1. ☒ Certified copies of the priority documents have been received.
  2. ☒ Certified copies of the priority documents have been received in Application No. 10110977.6.
  3. ☒ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

\* See the attached detailed Office action for a list of the certified copies not received.

**Attachment(s)**

- |  |   |
|--|---|
| 1) <input type="checkbox"/> Notice of References Cited (PTO-892)   | 4) <input type="checkbox"/> Interview Summary (PTO-413)<br>Paper No(s)/Mail Date. _____ |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948)                                   | 5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152)             |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)<br>Paper No(s)/Mail Date _____ | 6) <input type="checkbox"/> Other: _____  |

## **DETAILED ACTION**

### ***Response to Amendment***

1. Applicant's arguments filed 08/04/2005 regarding Office Action of 05/04/2005. Applicant amends claims 1, 13-14 and cancels claim 15.

### ***Response to Arguments***

2. Applicant's arguments filed 08/04/2005 have been fully considered but they are not persuasive.

Applicant argues that Papineni (6,246,981) (referred as Papineni) does not disclose a method for providing help information to a user in a speech dialogue system for operating a background application. Examiner respectfully disagrees. In col. 13, lines 38-42; col. 14 lines 33-34; and col. 9 lines 48-52, Papineni teach a form-level help commands allow for a "Helpmsg" command, thus implying that once the user requests help, the "Helpmsg" prompt is detected, "Helpmsg" is selected by Dialog Manager when user requests help on a form. Papineni has an option a). for optional list of forms to be enabled, user can not switch tasks until the current task is completed or until explicitly canceling out of it, col. 9 lines 64-65, col. 10 lines 41-42, and an option, those optional lists are corresponding to the state and context of output.b). for possible transactions are still available, such as buy and amount, col. 14 lines 34-36), thus Papineni has the help prompt in two states, one for all possible outcomes and another for user's who have not switched tasks until the current task is completed.

Applicant argues the claimed invention is non-obvious, examiner asserts that the claimed invention in anticipated by Papineni.

Applicant argues that the claimed invention provides a help system, however, examiner points to Papineni has a help system described within the sample script segment in Appendix A, col. 13 lines 34-39. Applicant argues that Papineni does not mention or suggest the problems of the prior art nor does it mention or suggest any measures which could solve the problems, however, examiner respectfully disagrees. Papineni anticipates the claimed invention, referred in the claim rejection below.

Therefore, claims 1, 13-14 are not patentably distinguishable from over Papineni et al., thus the rejection still stands, please refer to the claimed rejection below.

***Claim Rejections - 35 USC § 102***

3. Claims 1-14 are rejected under 35 U.S.C. 102(e) as being anticipated by Papineni et al (6,246,981).

As to claims 1 and 13, Papineni et al. teach the background application **(backend (application-specific software), col. 7 lines 4-5)** being modeled on principles P1 through P3:

P1) the background application **(backend)** can be interpreted as a finite set of transactions **(tasks)** T1, T2...,Tn **(col. 9, line 60-61. Backend performs the tasks.);**

P2) each transaction **(task)** has a finite set of parameters **(slot or form level)** required to execute the transaction **(task)** **(col. 9, lines 58-61. Backend performs the tasks described in the message, slot-level messages);**

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P3) each parameter (**slot or form level**) has an grammar (**attribute, col. 8 lines 46**) that serves to acquire a value (**col. 8 line 47**) for the parameter (**slot**) in a speech dialog (**Dialog manager, DM**) (**col. 9 lines 54-56, col. 12 lines 12-13, the DM uses a slot-level message, slots are filled directly from the input (attribute, value) pairs, thus necessarily acquiring a value that corresponds to the attribute.**);

the speech dialog system (**DM**) can assume at least the following states (**return codes**);

state a) no transaction has yet been selected, and the transactions T1, T2, . . . , Ti (**tasks**) are still possible (**return codes include an optional list of forms to be disabled and optional list of forms to be enabled, col. 9 lines 64-65, col. 13 lines 47-53, the disabled forms are necessarily unselected tasks, yet an optional list of forms are can be enabled, thus tasks are still possible**); and

state b) a transaction (**task**) has been selected, but not all values relating to this transaction (**task**) have yet been input (**optional list of forms to be enabled, user can not switch tasks until the current task is completed or until explicitly canceling out of it, col. 9 lines 64-65, col. 10 lines 41-42**);

a memory (**col. 7 line 46**) that necessarily stores a transaction prompt (**message**) for each transaction (**task**) (**DM stores messages, col. 10 line 43**);

a memory (**col. 7 line 46**) that necessarily stores a help prompt ("**Helpmsg**") for each parameter (**slot or form**) (**col. 13 lines 36-41, and col. 14 lines 29-35, form-level messages includes "helpMsg:", thus the help prompt is necessarily stored for each form**).

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an inherent detection unit to detect a global **(form-level)** help command **(Helpmsg)** to request help **(col. 13, lines 38-42; col. 14 lines 33-34; and col. 9 lines 48-52, form-level help commands allow for a “Helpmsg” command, thus implying that once the user requests help, the “Helpmsg” prompt is detected, “Helpmsg” is selected by DM when user requests help on a form.);**

an inherent output unit **(output interface, col. 7, line 46)** outputting a prompt corresponding to the state **(return code)** and context **(account number)** after detection of the global help command **(col. 13 lines 35-41, the Helpmsg is prompted after the user has not entered the account number, state a, and has to either enter the account number or under the command “StuckRecord”, the user will be transferred to an operator);**

such that at least one transaction prompt is output in the state a). **(no transactions have been entered, such as name of fund, col. 14 lines 34-36)** and at least one help prompt is output in the state b) **(possible transactions are still available, such as buy and amount, col. 14 lines 34-36).**

defining sub-states **(“begin”, col. 13 line 36-37)** for hierarchical structuring of a help function associated with the help prompt (hierarchical structure would be the \msg HelpMsg\ script before the sub-state **“begin”, col. 13 lines 35-39)**, the sub-states being assigned to transactions **(enter account number, col. 13 lines 35-39)** and sub-states **(\msg HelpMsg\, col. 13 lines 35-39)**

outputting (the output unit), using the speech dialog systems (Fig. 1, speech output, dialog manager, element 40), the sub-sbstates and transactions available in the

respective sub-substate in the even of detection of the global help command (\msg HelpMsg\, col. 13 lines 35-39), the sub-substates and transactions available being output either by a help prompt followed by an enumeration of transaction prompt (col. 13 lines 31-39 and col. 14 lines 29-39; the first sub-state is the help message in entering the account number, the sub-substate would be after the person is in the account, in the beginning transaction of purchasing a fund, the help message sub-substate is "name of fund you want to buy" and the other one is "switch & size" or "specify amount", all of which are hierarchical in nature because the help transaction depends on the previous transaction, such as the first sub-state would not be required after the sub-substate help prompt is activated, the help dialog would not need to ask for the account number when the user needs help in dictating which fund they want to purchase or the name of the fund they want to buy).

As to claim 2, Papineni et al. teach wherein the help prompt stored for each parameter specifies the form in which a value for the parameter is to be input (**col. 14 lines 33-35, col. 9 lines 2-9, "Helpmsg" is necessarily stored for the form-level tasks in which a value, such as "buy" or "specify an amount", for the slot is to be inputted**).

As to claims 3 and 8, Papineni et al. teach wherein after detection of the global help command in state a) (**col. 14 lines 35-40**) and all possible transactions, transactions are output to with a global help prompt (**col. 14 lines 33-35, also has all**

**the options listed for that task, under the “helpmsg” prompt, thus the “helpmsg” is a global help message because the user can access the “helpmsg” prompt from either form-level or slot-level interactions).**

As to claims 4 and 9, Papineni et al. teach wherein a global help prompt is stored **(col. 14 lines 35-40, “Helpmsg” is necessarily stored because the backend retrieves it); and**

**after uttering the global help command (user request help on a task, col. 9 lines 49-52), a user is provided with possible options for state a) by a combination of the global help prompt (“Helpmsg”) and the transaction prompt (options for purchase, buy, and amount) (col. 14 lines 33-36).**

As to claims 5 and 10, Papineni et al. teach wherein an option prompt is stored and output with all values that are possible for a respective parameter **(col. 14 lines 34-36, output value options are listed, thus options were necessarily stored in order for user to receive the options).**

As to claims 6 and 11, Papineni et al. teach wherein a grammar is stored for each possible user input **(col. 8 lines 29-31, 57-60 and col. 10 lines 65-66, semantic representation necessarily implies grammar, the attribute part of the pair, is necessarily stored in order for the system to match or identify key words, the**



**attribute and value is stored in a DM's memory).**

As to claims 7 and 12, Papineni et al. teach wherein after detecting of the global help command in state a). the available transactions are hierarchically ordered **(parse tree) (a list of (attribute, value) pairs are assembled and some of the attributes, such as labels, are from a parse tree, col. 8 lines 46-49, the attributes, such as the labels are from a parse tree which is necessarily hierarchical in order).**

As to claim 14, Papineni et al. teach a method for providing help information to a user of a voice operated system that executes one of a plurality of transactions after the transaction has been identified and a value for each parameter associated with the transaction has been entered comprising:

hierarchically structured transactions using sub-state such that sub-substates are defined within sub-state and transactions are defined within a sub-state (col. 14 lines 29-39; sub-substates are the \msg CancelMsg\ or \msg Help Msg\ for purchasing transaction(s));

receiving an oral command requesting help **(user request help, col. 9 line 50, speech dialog system necessarily implies oral communication)** matching the oral command with a stored global help command **(col. 13 line 36-37, and col. 14 lines 35-37, the system would necessarily respond by matching the oral command (purchase) with the stored "Helpmsg" command (purchase requires the name of the fund you want to buy));**

outputting at least one transaction prompt if the user has not identified the transaction (**prompt for missing information, col. 13, lines 29-32**);

outputting at least one parameter help prompt (**form level "helpmsg" prompt**) if the user has identified the transaction, but has not entered a value for each parameter associated with the transaction (**col. 14, lines 26-28 & 34-37, the DM requests user to enter name of fund which implies that the user has not entered a value for each parameter associated with the transaction**).

determining a hierarchical location of a user within a sub-state when the oral command is matched with the stored global help command (col. 14 lines 37-40);

outputting, using the speech dialog systems (Fig. 1, speech output, dialog manager, element 40), the sub-sbstates and transactions available in the respective sub-substate in the even of detection of the global help command (\msg HelpMsg), col. 13 lines 35-39), the sub-substates and transactions available being output either by a help prompt followed by an enumeration of transation prompt (col. 13 lines 31-39).

### ***Conclusion***

8. Applicant's amendment necessitated the new ground(s) of rejection presented in this Office action. Accordingly, **THIS ACTION IS MADE FINAL**. See MPEP § 706.07(a). Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire **THREE MONTHS** from the mailing date of this action. In the event a first reply is filed within

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TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the date of this final action.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Myriam Pierre whose telephone number is 571-272-7611. The examiner can normally be reached on 8:30-5:30.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Richemond Dorvil can be reached on 571-272-7602. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

11/01/2005 MP

  
VIJAY CHAWAN  
PRIMARY EXAMINER